Abstract

A method and circuit for terminating a pre-amplification array for stable linearity

of a folding or flash analog-digital-converter (ADC) circuit over a temperature range.

Termination resistors with pre-selected temperature coefficients are coupled between

outputs of a first and a last amplifier of an amplifier bank in an averaged pre-

amplification stage and a termination voltage source. The termination resistors and the

termination voltage provide a current that compensates temperature dependent changes in

the current flowing from other amplifiers outputs towards the output of the first and last

amplifiers stabilizing linearity when temperature changes. Multiple termination resistors

with different temperature coefficients may be employed to better approximate the

desired temperature coefficient for optimum performance.

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